



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,308	12/06/2001	Kin Doe	ADAPP201A	2794
25920	7590	11/07/2005	EXAMINER	
MARTINE PENILLA & GENCARELLA, LLP 710 LAKEWAY DRIVE SUITE 200 SUNNYVALE, CA 94085			CHAI, LONGBIT	
			ART UNIT	PAPER NUMBER
			2131	

DATE MAILED: 11/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/006,308

Applicant(s)

DOE ET AL.

Examiner

Longbit Chai

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 February 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 February 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Priority*

1. No claim for priority has been made in this application.

The effective filing date for the subject matter defined in the pending claims in this application is 12/6/2001.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.  
(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Veil et al. (PN: 6092202).

As per claim 10, Veil teaches a computer security system for a computer, comprising:

an encryption control device, the encryption control device being in communication with the computer (Veil: Figure 4 Element 104), the encryption control device including,

a card reader, the card reader being in communication with an encryption control device microprocessor (Veil: Figure 4 Element 126),

a biometric identifier, and an encryption engine (Veil: Column 12 Line 4 – 12);

a card, the card being adapted to be read by the card reader to validate a user as an authorized owner of the card in conjunction with the biometric identifier, wherein upon validation of the user, the encryption engine activates to create a secure environment (Veil: Column 1 Line 8).

As per claim 12, Veil teaches the encryption engine executes RSA public-key cryptosystem (Veil: Column 4 Line 46 – 55).

3. Claims 1, 7 and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Vu et al. (PN: 6557104).

As per claim 1, Vu teaches an apparatus to enable operation of a computer by authorized users when in a secure mode of operation, the apparatus comprising:

a hub, the hub being configured to be in communication with the computer (Vu: Column 5 Line 24 – 28), the hub further including,

a card reader (Vu: Column 2 Line 23 – 25),

a hub microprocessor (Vu: Column 5 Line 24 – 28), and

an encryption engine (Vu: Column 5 Line 24 – 46);

a card, the card being configured for insertion into the card reader, the card including a card microprocessor (Vu: Column 2 Line 23 – 25); and

a user authentication device, the user authentication device being configured to validate the user as an authorized user of the card wherein, if the user is validated as the authorized user, the card microprocessor being configured to pass a key to the hub microprocessor in response to the validation of the user as the authorized user of the card (Vu: Column 4 Line 52 – 54), thereby activating the encryption engine of the hub to operate in the secure mode of operation (Vu: Column 5 Line 24 – 46).

As per claim 7, Vu teaches the card microprocessor includes a cryptographic microprocessor (Vu: Column 2 Line 1 – 25).

As per claim 9, Vu teaches the hub includes control switches to bypass the hub to operate the computer in a non-secure mode of operation (Vu: Column 2 Line 53 – 61: control switches is a logical switches between the process of secure and non-secure operating modes).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A person shall be entitled to a patent unless –

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

Art Unit: 2131

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 5, 6 and 16 – 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vu et al. (PN: 6557104), in view of Veil et al. (PN: 6092202).

As per claim 16, Vu teaches an apparatus for providing a secure operating environment for a computer, the apparatus comprising:

an encryption control device, the encryption control device (ECD) being in communication with the computer (Vu: Column 5 Line 24 – 28), the ECD further including,

a card reader (Vu: Column 2 Line 23 – 25),

an ECD microprocessor (Vu: Column 5 Line 24 – 28),

an encryption engine (Vu: Column 5 Line 24 – 46), and

a smart card, the smart card being configured for insertion into the card reader, the smart card including a smart card microprocessor (Vu: Column 2 Line 1 – 25), wherein upon the insertion of the smart card into the card reader, a secure path is established between the smart card microprocessor and the ECD microprocessor after completion of authentication of a user and completion of a challenge/response protocol, thereby unlocking an encryption engine to provide the secure operating environment (Vu: Column 1 Line 38 – 48).

However, Vu does not teach using a biometric scanner.

Veil teaches using a biometric scanner (Veil: Column 12 Line 4 – 12).

Art Unit: 2131

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Veil within the system of Vu because Veil teaches providing secure transaction of computer systems in a more reliable, easier implementation and cost effective manners (Veil: Column 1 Line 5 – 20 and Column 3 Line 30 – 36).

As per claim 5, Vu does not teach the user authentication device is a biometric scanner.

Veil teaches the user authentication device is a biometric scanner (Veil: Column 12 Line 4 – 12).

Same rationale of combination applies herein as above in rejecting the claim 16.

As per claim 6, Vu as modified teaches the biometric scanner scans one of a fingerprint, an iris and a face.

Vu as modified teaches the biometric scanner scans one of a fingerprint, an iris and a face (Veil: Column 12 Line 4 – 12).

As per claim 17, Vu as modified teaches the ECD includes a storage medium for storing encrypted data (Vu: Column 5 Line 35 – 36).

As per claim 18, Vu as modified teaches encrypted data is stored on a virtual drive of the computer (Veil: Column 4 Line 21: memory disk is qualified as a virtual drive of the computer).

As per claim 19, Vu as modified teaches the continued presence of a user is monitored (Veil: Column 7 Line 58 – 62).

5. Claims 2 – 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vu et al. (PN: 6557104), in view of Morais et al. (PN: 2003/0093669).

As per claim 2, Vu does not teach the hub includes a plurality of USB ports.

Morais teaches the hub includes a plurality of USB ports (Morais: Para [0033] and Para [0036]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Morais within the system of Vu because Morais teaches establishing secure communications between computer systems connected in a networking environment (Morais: Para [0001]).

As per claim 3, Vu does not teach the hub includes a plurality of FIREWIRE ports.

Morais teaches the hub includes a plurality of FIREWIRE ports (Morais: Para [0033] and Para [0036]).



Same rationale of combination applies herein as above in rejecting the claim 2.

As per claim 4, Vu does not teach the computer is connected to the hub through one of a USB or FIREWIRE interface.

Morais teaches the computer is connected to the hub through one of a USB or FIREWIRE interface (Morais: Para [0033] and Para [0036]).

Same rationale of combination applies herein as above in rejecting the claim 2.

6. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vu et al. (PN: 6557104), in view of Gerszberg et al. (PN: 6452923).

As per claim 8, Vu does not teach the encryption engine includes a plurality of encryption/decryption channels.

Gerszberg teaches the hub includes the encryption engine includes a plurality of encryption/decryption channels (Gerszberg: Column 37 Line 3 – 15: a plurality of encryption/decryption engines, as taught by Gerszberg, is interpreted as a plurality of encryption/decryption channels with the capabilities to execute the algorithm for encrypting / decrypting the data passing through the device to provide secure tunneling).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gerszberg within the system of Vu because Gerszberg teaches a more secure networking environment by providing

Art Unit: 2131

tunneling and encryption of data transmission through encryption engines in the target device (Gerszberg: Column 37 Line 3 – 15).

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al. (PN: 6092202).

As per claim 11, Veil teaches the encryption control device is portable (Veil: Column 11 Line 37 – 38: Official Notice is taken that the use of a portable computer is one of the well-known methods in the field).

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al. (PN: 6092202), in view of Lelong et al. (PN: 6463540).

As per claim 13, Veil does not disclose expressly the encryption control device is hot plugable.

Lelong teaches the encryption control device is hot plugable (Lelong: Column 1 Line 52).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Lelong within the system of Veil because Lelong teaches a more flexible and dynamic mechanism of an attachable interface of computer systems (Lelong: Column 1 Line 45 – 52).

Art Unit: 2131

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al. (PN: 6092202), in view of Walter et al. (PN: 6151677).

As per claim 14, Veil does not disclose expressly the encryption engine is a field programmable gate array.

Walter teaches the encryption engine is a field programmable gate array (Walter: Column 3 Line 56 – 57).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Walter within the system of Veil because Walter teaches providing a more flexible and secure method by using a programmable information security architecture with a firmware implemented data encryption and decryption algorithms (Walter: Column 3 Line 50 – 61).

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Veil et al. (PN: 6092202), in view of Vu et al. (PN: 6557104).

As per claim 15, Veil does not disclose expressly the card includes a card microprocessor, the card microprocessor being configured to execute a challenge/response protocol for establishing a secure path through the encryption control device.

Vu teaches the card includes a card microprocessor (Vu: Column 2 Line 1 – 25), the card microprocessor being configured to execute a challenge/response protocol for

Art Unit: 2131

establishing a secure path through the encryption control device (Vu: Column 1 Line 34 – 46).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Vu within the system of Veil because Vu teaches an enhanced security system for secure processing of cryptographic keys (Vu: Column 1 Line 7 – 9).

11. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Vu et al. (PN: 6557104), in view of Veil et al. (PN: 6092202), and in view of Miller (PN: 6038320).

As per claim 20, Vu as modified does not disclose expressly the ECD is locked by a hot key sequence.

Miller teaches the ECD is locked by a hot key sequence (Miller: Column 1 Line 41 – 42).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Miller within the system of Veil because Miller teaches a flexible and enhanced security method to securely protect the computer from unauthorized access (Miller: Column 1 Line 40 – 47).

Art Unit: 2131


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Longbit Chai whose telephone number is 571-272-3788. The examiner can normally be reached on Monday-Friday 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz R. Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Longbit Chai  
Examiner  
Art Unit 2131

  
LBC

  
AYAZ SHEIKH  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100